

## Flower Garden



## **Mathematics Performance Event**

Grades 6-8

by

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## Flower Garden

**Purpose:** The purpose of this activity is to assess a student's ability to use their computational skills and knowledge of using charts to find total cost. The student is asked to make a plan for a garden that stays within a specified range and meets specified criteria.

#### **Show-Me Standards Addressed:**

Knowledge: M5

Performance: 1.8, 3.3

**Grade Level Range:** 6-8

**Subject Area:** Mathematics

**Materials Needed:** pencil, ruler, Student Event Packet (containing the Student Prompt, the Botany Place Price Sheet, the Response Sheets #1 and #2, and the Scoring Guide).

**Time Needed for Event:** 50 minutes

**Instructions for Administration:** Present the student with the Student Prompt and make sure he/she clearly understands what is expected. Go over the scoring guide to ensure the student knows what is meant by quality.

#### **Pre-Assessment Instructions:**

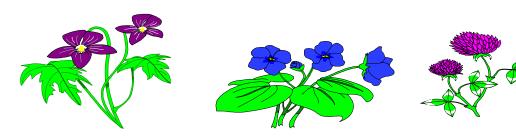
Prior to the assessment the students must know how to add, subtract, and multiply money amounts. They will need to know how to read a table and make simple blueprint designs.

## Flower Garden: Student Prompt

Your class is responsible for designing a flower garden to be put on the front lawn of the school. Use Student Response Sheet #1 to draw a plan of your flower garden. Be sure to label the items in your garden. Use the Botany Place Price Sheet to get your pricing information. The class agreed that the flower garden must:

- \* have at least 6 different kinds of plants
- \* have something in bloom each season.
- \* have at least 1, but not more than 4 different decorations.
- \* cost between \$65 and \$75 to make.

To make sure the cost for making the flower garden stays within the specified cost range, use Student Response Sheet #2 to write your calculations in figuring the total cost.

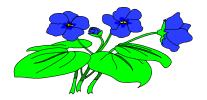


# The Botany Place Price Sheet

PLANTS	BLOOMING SEASON	PRICE
ornamental cabbage	winter	\$1.00
geranium	summer	\$0.75
hyacinth	spring	\$0.50
marigold	summer	\$0.25
tulips	spring	\$0.50
imptients	summer	\$0.25
mums	fall	\$1.00
Clematis (needs trellis)	summer	\$2.00
daffodils	spring	\$0.50

DECORATIONS	PRICE EACH
bird bath	\$10.00
squirrel statue	\$6.75
gleaming ball	\$8.25
bird house	\$4.50
trellis	\$7.00
pink flamingo	\$2.50







Student Response Sheet #2: Flower Garden		
The class agreed that the flower garden must cost between \$65 and \$75 to make. To make sure the cost for making the flower garden stays within the specified cost range, write your calculations in figuring the total cost.		

### Student Response Sheet #1: Flower Garden

To make sure the cost for making the flower garden stays within the specified cost range, use this sheet to write down your calculations. Write the total cost in the blank on the bottom.

The total cost for making the flower garden is:

#### Scoring Guide: Flower Garden

#### 4 points The student's response fully addresses the performance task/event.

#### The response:

- \* demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
- \* meets all of the specified criteria and the cost is within the price range.
- \* may have only minor flaws with no effect on the reasonableness of the solution.

#### 3 points The student's response substantially addresses the performance task/event.

#### The response:

- \* demonstrates knowledge of the mathematical concepts and principles needed to complete the event.
- \* meets most of the specified criteria and the cost is within the price range.
- \* may have only minor flaws with minimal effect on the reasonableness of the solution.

#### 2 points The student's response partially addresses the performance task/event.

#### The response:

- \* demonstrates a limited knowledge of the mathematical concepts and principles needed to complete the event.
- \* meets only a few of the specified criteria and the cost may or may not be within the price range.
- \* may have minor flaws or extraneous information that indicates some lack of understanding or confusion.

#### 1 point The student's response minimally addresses the performance task/event.

#### The response:

- \* demonstrates a little or no knowledge of the mathematical concepts and principles needed to complete the event.
- \* meets few if any of the specified criteria and the cost is not within the price range.
- \* has critical flaws or extraneous information that indicate a severe lack of understanding.

#### **0 points** Other responses, no attempt, or off task.